SCHOOL BUILDING SURVEY OF CLINTON TOWNSHIP, VERMILLION COUNTY, INDIANA

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CHAPTER I

INTRODUCTION

Since World War II, educators and other interested groups have conducted an intensified campaign aimed at arousing public interest in the needs and problems confronting the public schools of this nation. National and state surveys have definitely shown that many schools are faced with increased and increasing enrollments that cannot be properly educated in existing school plants.

Nationwide and statewide trends do not necessarily present a true picture of trends in specific communities. That picture must come from surveys made at the local level.

I. THE PROBLEM

Statement of the problem. The purpose of this study was (1) to attempt to determine the extent to which the school buildings of Clinton Township are adequate to meet the educational needs of present and predicted future enrollments; and (2) to make suggestions for improving the housing provisions for the elementary school children of the township.

Importance of the study. In a recent publication, the

American Association of School Administrators[1] made this rather obvious statement, "The way to provide good schools without wasteful expenditures is to plan wisely." It is just as obvious that wise planning will start with an evaluation of the present school system in the light of the best available criteria.

This study was made in an attempt to obtain objective data on the elementary schools of Clinton Township. It was hoped that the data would be used in planning better educational opportunities for the children of the community.

Scope of the study. The study sticks closely to the problem of evaluating building space provisions for present and expected enrollments. Structural safety, location and site, and service facilities were considered as they contributed to the general worth of the buildings.

II. ORGANIZATION

Chapter II contains a review of the literature that was considered authoritative in the fields of school surveys, building and space evaluations, and enrollment predictions.

Chapter III comprises the main portion of the study.

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[1] American School Buildings, National Education Association, American Association of School Administrators (Washington D. C., 1949), p. 10.

It includes the development of evaluative criteria, evaluations of the four buildings, and results of the school census. School census results are coupled with past enrollments to produce tables predictive of future enrollments.

A summary of the study and recommendations for additional studies appear in Chapter IV.

CHAPTER II

REVIEW OF THE LITERATURE

Of the wealth of materials that have been written on the various aspects of this study, only a representative portion can be included. In general, the studies reviewed are either of general national value, or are especially applicable to the elementary schools of Indiana.

Literature on school surveys. The Division of Research and Field Service of Indiana University[1] has listed the major factors to be considered in school building planning to be (1) a study of community characteristics; (2) the geographic distribution of the school children and a prediction of future enrollments; (3) an evaluation of present building facilities and an estimate of future needs; and (4) the financial ability of the school corporation to provide needed building facilities.

Steps quite similar to the above were outlined by Strayer[2] who progresses from an evaluation of present school

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[1] A Study of the Public School Needs of Nappanee, Indiana, Division of Research and Field Services, School of Education, Indiana University, School Survey Series, No. 2 (Bloomington, Indiana, 1948), pp. 1-2.

[2] George D. Strayer, Jr., "Planning for School Surveys," Bulletin of the School of Education, Indiana University, No. 2 (Bloomington, Indiana, March, 1948, Vol. 24), pp. 15-16.

facilities to population studies, to an estimate of building and site needs, to the actual building program that may include the rehabilitation of existing space.

Literature on evaluating school buildings. In order to determine the worth of buildings used for educational purposes, this general test was devised by a national group of educators:

> Curriculum adequacy - Do they provide the space and facilities for the educational program that your community needs for its children, youth, and adults?
>
> Safety and well-being - Do they not only protect against danger but also provide a positive influence for improving the health and physical welfare of the pupils?
>
> Interfunctional coordination - Are they so planned that the activity in each part of a building may be coordinated harmoniously with related activities and may be carried on effectively without disturbing other activities?
>
> Efficiency and utility - Are they so planned that the handling of materials and the comings and goings of pupils, school staff, and the public are accomplished with a minimum of interference and a maximum of ease and satisfaction to all concerned?
>
> Beauty - Are they pleasing in appearance, with simplicity, usefulness, and balance as ideals, rather than ornamentation or symmetry?
>
> Adaptability - Are they so planned that they can be enlarged or rearranged internally to meet new educational demands with a minimum of additional cost?
>
> Economy - Are they so planned that in original outlay and in future operation the utmost in educational utility can be secured for every dollar spent?[3]

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[3] American School Buildings, op. cit., p. 8.

Structural safety, health safegurads, pupil comfort, suitability in relation to type of school program wanted, flexibility, economical operation, adaptability to possible increase in enrollment, and beauty and fitness of design were evaluative points stressed by a survey group from Indiana University.[4]

Literature on specific aspects of building evaluation, such as lighting, heating, classroom space, water supply, ventilation, and toilet facilities is discussed in the next chapter of this study.

Literature on enrollment trends. Wyatt[5] has reported that Indiana schools must expect a quarter-million more students in the 1950's than were in attendance in the 1940's. He estimated that eight thousand new classrooms will be needed.

Estimates made by the Indiana School Study Commission[6] indicate that there will be an average increase in elementary enrollment of approximately twenty-eight per cent during the period from 1950 to 1960 over the enrollment for the 1948-49

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[4] A Study of the Public School Needs of Nappanee, Indiana, op. cit., p. 14.

[5] Robert H. Wyatt, "It Is Time to Build," The Indiana Teacher, 94:151, January, 1950.

[6] An Evaluation of the Indiana Public Schools, Indiana School Study Commission (Indianapolis, 1949), p. 136.

school year. The Commission predicted that the peak in elementary enrollment in Indiana schools would occur in the 1956-57 school year.

A national study has resulted in predictions that the population of the United States will continue to increase for another thirty-five to forty-five years and that the peak will approximate one hundred sixty-five millions. However, the peak in school age population will be reached in 1960 or 1961 after which there will be a steady decline.[7]

Literature on predicting enrollment trends. The A.A.S.A.[8] has listed the various methods for estimating future school enrollments as being:

1. A method which assumes the ratio between school enrollment and total population to be fairly constant. By comparing school enrollments with Federal census figures for each of the two or three previous decades an average ratio can be computed. This ratio is applied to the future estimated total population of the district.

2. Enrollments of past years are plotted on a chart and projected as a straight line. This method is not very reliable.

3. The Bell Telephone method bases the total population

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[7] American School Buildings, op. cit., p. 54.

[8] Ibid., p. 55.

on a careful house-count of small sections within a large community. The total population can then be translated into estimated school enrollment.

4. Forecasting by analogy involves using enrollment-total population ratios of similar communities as the basis for enrollment estimates in the particular community. The difficulty of finding comparable communities makes this method generally unreliable.

Studies made of the above methods, as they were used during the 1920's, have shown that they were too high in their predictions. This may be due to the fact that the 1930 depression, with its accompanying birth rate decline, was not foreseen.[9]

A per cent-of-survivorship method was recently devised by the Bureau of Research of Ohio State University. Since this method was used, to the extent possible, in making enrollment predictions for this study, an actual account of the procedure as used in 1947 follows:

> Take the actual number of resident births in the school district between the years 1934 thru 1946. Those born in the years 1934 to 1940 would become six years of age in the years 1940 to 1946 and should, therefore, be enrolled in school during those years for which actual enrollments are now known. For each of these years calculate the per cent of survivorship between the number of births and the enrollment in the first grade of the public schools for the known years, which in this case would be 1940 to 1946. Take the

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[9] Ibid., pp. 55-56.

average of the per cents for the known years and apply it to the actual number of births which occurred during 1940 to 1946 to get the estimated enrollments in the first grade for the years 1946 to 1952 during which time those children born between 1940 and 1946 would enter school.

In a similar manner calculate the per cent of survivorship from Grade I to Grade II and so on and apply those to the known figures to get estimates in years immediately ahead. In this connedtion, it should be remembered that children born during 1940 thru 1946 will enter school during the years 1946 thru 1952 and will affect the total school enrollment twelve years beyond the latest date of entry, that is, from 1952 thru the year 1964.[10]

Literature on the building's role in supporting the modern educational philosophies. "The first requirement for a good school is that it rest on values that are good. The second requirement is that it be efficient in promoting the good values."[11] The building obviously plays an important role in the efficient promoting of good values.

Dr. Muller[12] must have had more than four walls and a roof in mind when he said, "The three R's long ago lost their adequacy as a basis for the kind of literacy needed by a democracy in the modern, so-called scientific age."

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[10] Ibid., p. 56.

[11] Education for All American Children, National Education Association, Educational Policies Commission (Washington, D. C., 1948), p. 1.

[12] Morton M. Hunt, "Dr. Muller and the Million Human Time Bombs," The Indiana Teacher, 94:123, December, 1949.

The following quotations from the writings of professional school people emphasize the importance of good building facilities to the school program:

> Nothing is more indicative of community spirit and progress than a good educational system, housed in a modern up-to-date school plant. The learning of the pupils reaches maximum efficiency only when good building facilities exist as a part of the school environment.[13]

> The schoolhouse is a place for many kinds of learning; the schoolhouse itself is an instrument of education. It can teach children much of beauty, of useful ordering of space, and of the possibilities of harmonious living. There is increasing recognition of the school building as a place that will help children grow to their best physically as well as mentally; their seeing, posture, nutrition, and every bodily process should be helped toward the ideal by the conditions of life at school.[14]

> An attractive, home-like school building, conveniently arranged, and pleasingly decorated is more productive of good attitudes than bleak, formal, and unattrative surroundings.[15]

> Our schools will be better; our children will be healthier, mentally and physically; our teachers will be stronger and more productive, and will be held in higher esteem if the physical environment in which they work is cheerful and stimulating.[16]

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[13] A Study of the Public School Needs of Nappanee, Indiana, op. cit., p. 1.

[15] American School Buildings, op. cit., p. 9.

[15] An Evaluation of the Indiana Public Schools, op. cit., p. 46.

[16] Robert H. Wyatt, op. cit., p. 151.

CHAPTER III

AN EVALUATION OF THE BUILDINGS IN TERMS OF PRESENT AND FUTURE NEEDS

Before the schoolhouses in Clinton Township could be evaluated, it was necessary to set up evaluative principles, to consult authoritative sources for the purpose of determining generally accepted standards which school buildings should meet, and to develop criteria by which an objective evaluation could be made. The first portion of this chapter contains that information.

After the criteria were established, each of the four buildings was considered in the light of its ability to meet the stated requirements. The 1949-1950 school enrollments were used as a basis for determining the present adequacy of space provisions.

The third section of the chapter is devoted to an attempt to ascertain the future building needs of Clinton School Township. The results of a school census were combined with past enrollments to produce tables predictive of future enrollments.

I. EVALUATIVE PRINCIPLES AND CRITERIA

The principles used and the criteria developed were limited to those areas of building evaluation that deal

directly with space and service provisions and with the structure's general worth. There was no attempt made to determine the value of movable equipment, landscaping, color schemes, window shades, etc. If the building is structurally unsound or lacking in space and service provisions, then beautiful shrubs, the latest type desks, freshly painted walls, and venetian blinds will not convert it into an efficient educational plant.

A. PRINCIPLES

Principle 1. The building should be located on an adequate site convenient to the homes of the pupils in the attendance area.

The school should be located within walking distance of as many pupils as possible. Elementary pupils should not walk more than three-quarters of a mile. It is not desirable for transported students to be on the bus for longer than thirty minutes of one-way travel time.[1]

The site should be remote from disturbing noises, heavy traffic, and obnoxious odors. It is recommended that the school plot be five acres in size with an acre added for each one hundred students.[2]

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[1] American School Buildings, op. cit., p. 73.

[2] Ibid., pp. 75-76.

The Indiana School Study Commission also expressed a belief that a site of five acres plus an additional acre for each one hundred pupils is desirable for elementary schools.[3]

A group of educators in West Virginia has recommended a two acre site for a two room school. An acre should be added for each additional room up to ten acres. The site should have good drainage.[4]

Back in 1933 Strayer and Engelhardt[5] thought it unwise to locate an elementary building on less than five acres of ground.

Principle 2. The building must be structurally safe, internally and externally.

Cracked and leaning walls, sagging roofs, and falling ceilings are evidences of inadequate structural design.[6]

Floors and stairs should be level, sound, and rigid to the tread.[7]

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[3] An Evaluation of the Indiana Public Schools, op. cit., p. 141.

[4] Standards for Schoolhouse Construction, West Virginia Council on Schoolhouse Construction (Charleston, West Virginia: State Department of Education, 1945), p. 12.

[5] George D. Strayer and N. L. Englehardt, Standards for Elementary School Buildings, (New York: Bureau of Publications, Teachers College, Columbia University, 1933), p. 16.

[6] American School Buildings, op. cit., p. 177.

[7] Ibid., p. 268.

A building of more than one story should be constructed of fire-resistive materials, including floors, roof, windows, and doors.[8]

Stairs must be made of incombustible materials. At least two stairways remote from each other should be provided. Staris should not be less than forty-eight inches wide, and should not rise to a height of over nine feet beyond a landing.[9]

"The number and location of corridors and stairways should permit rapid circulation within, and easy egress from the building."[10]

While fire escapes should not be approved for new buildings, they are needed in old structures in which the stairways are vulnerable to fire.[11]

The heating plant should not be housed in the school building. However, if it is in the building, the furnace room must have an automatic-closing fire door. The fire alarm system should be available from several spots in the building.[12]

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[8] Ibid., p. 169.

[9] Standards for Schoolhouse Construction, op. cit., pp. 32-33.

[10] The Administration Handbook, Bulletin No. 200, Indiana Department of Public Instruction (Indianapolis, 1948) p. 100.

[11] Standards for Schoolhouse Construction, op.cit.,p.35.

[12] Guide for Planning School Plants, National Council on Schoolhouse Construction, 1949, pp. 116-117.

Exit doors must open outward and be provided with anti-panic bars.[13]

Principle 3. Classroom space should be commensurate with instructional needs.

The present requirement of eighteen square feet per pupil in Indiana classrooms is far from adequate. The provision of twenty-five to thirty square feet is not too generous. In the core curriculum type classroom it is desirable to provide thirty-three square feet per pupil.[14]

Specialists in elementary education believe that the modern elementary program demands approximately thirty square feet per student. This requirement is in addition to storage and accessory spaces.[15]

The National Council on Schoolhouse Construction[16] considers thirty square feet per student as essential, while the West Virginia Council on Schoolhouse Construction[17] recommends thirty to forty square feet per pupil in primary class-

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[13] Ibid., p. 123.

[14] An Evaluation of the Indiana Public Schools, op. cit., p. 155.

[15] American School Buildings, op. cit., p. 88.

[16] Guide for Planning School Plants, op. cit., p. 41.

[17] Standards for Schoolhouse Construction, op. cit., p. 52.

rooms.

Principle 4. Mechanical and service facilities must safeguard the health and comfort of pupils and staff.

In 1948 the State of Indiana Department of Public Instruction listed service system requirements as consisting of (a) heating and ventilation systems providing a sufficient amount of pure fresh air at a steady temperature of approximately seventy degrees, and with a relative humidity of thirty to fifty per cent; (b) a flourescent or semi-direct lighting system of at least four outlets per classroom capable of delivering twenty to fifty foot candles at desk level; (c) an adequate supply of pure water; and (d) sufficient toilet and lavatory facilities.[18]

Service recommendations of the West Virginia Council include (a) toilet facilities for each sex on every floor except the basement; (b) girls' toilets provided with one water closet for each 30 girls enrolled; (c) boys' toilets to be provided with one water closet for each 60 and one urinal for each 30 boys enrolled; and (d) one lavatory for each group of 60 students.[19]

The water system must be capable of supplying a minimum of twenty-five gallons of water per pupil per day for all pur-

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[18] The Administration Handbook, op. cit., pp. 100-101.

[19] Standards for Schoolhouse Construction, op. cit., pp. 63-64.

poses except for swimming pools. The water must be pure and palatable.[20]

Toilet rooms should be at least ten feet in width. Ventilation must be positive. Toilet facilities adjacent to the classroom are desirable for the primary rooms. Water closet and lavatory heights should conform to the sizes of the pupils using them.[21]

One drinking fountain is a minimum for each floor, and an additional fountain should be provided for each group of 75 pupils.[22]

The total area of window space in each classroom should at least equal twenty per cent of the floor area. Window sills should be thirty-six inches from the floor to be above the eye level of seated pupils. The most effective natural light comes in at the top of the windows making it desirable for windows to extend to within six inches of the ceiling.[23]

Principle 5. Space for auxiliary facilities should be provided to supplement the instructional, recreational, and health programs.

In a recent survey of elementary schools in Carroll

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[20] American School Buildings, op. cit., p. 162.

[21] Ibid., pp. 162-163.

[22] Ibid., p. 164.

[23] Ibid., pp. 226-227.

County, Indiana, a group from Purdue University[24] outlined the special facilities needed beyond classrooms as being (a) indoor play space, (b) a small auditorium for school and community use, (c) a suit of small rooms for a health unit, (d) a school library housed in a suitable room, (e) adequate office space, and (f) a lunch room. The group also listed music, art, and visual education rooms as being desirable.

"An adequate hot lunch program should be provided in every elementary school for children who spend their noon periods at the school."[25]

"Approximately 10 square feet per person should be allowed in the dining area for the largest lunch shift."[26]

"It is widely accepted that children will learn best when they have access to good school library facilities."[27]

The elementary library should comfortably seat the largest class in school plus approximately twenty additional readers. It should be centrally located and easily reached from all portions of the building.[28]

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[24] Report of Building and Site Survey, Delphi-Deer Creek Township Schools, Carroll County, Indiana, by the Division of Education and Applied Psychology, Purdue University, Lafayette, Indiana, June, 1949, p. 7.

[25] An Evaluation of the Indiana Public Schools, op. cit., p. 71.

[26] American School Buildings, op. cit., p. 119.

[27] An Evaluation of the Indiana Public Schools, op. cit., p. 57.

[28] American School Buildings, op. cit., pp. 112-113.

Health unit provisions should consist of a rest room with space for one or more cots. Toilet and lavatory facilities must be provided adjacent to the rest room. It is desirable that examination rooms be provided for use by the school nurse and for periodic inspection of pupils by doctor and dentist.[29]

A flat-floor auditorium capable of seating two hundred to four hundred people in folding chairs will be reasonably satisfactory for small elementary schools. The stage must be large enough for school and community plays and programs. Dressing room space and adequate stage equipment are necessary. Use of folding chairs will permit conversion of the auditorium into an indoor play space for the younger students.[30]

"Gymnasiums (with showers and lockers) and other facilities suitable for a modern health and physical education program are necessary."[31]

Each building will need administrative space. A room approximately the size of a classroom will serve the administrative needs of smaller elementary schools.[32]

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[29] Standards for Schoolhouse Construction, op. cit., p. 50.

[30] American School Buildings, op. cit., p. 118.

[31] The Administration Handbook, op. cit., p. 101.

[32] American School Buildings, op. cit., p. 124.

Storage space for classroom supplies, for the outer wraps of pupils, and for individual supplies of pupils should be provided at a location near or within the classroom. Special storage rooms are needed for general instructional supplies, custodial and maintenance supplies, and fuel storage.[33]

B. CRITERIA

The standards listed below for use in evaluating the schoolbuildings of Clinton Township were taken from the sources cited in the preceding section of this chapter. However, modifications have been made in many of the source recommendations in an effort to make the criteria more directly applicable to the task at hand.

These criteria were intended for use in evaluating old elementary school buildings with enrollments of two hundred fifty pupils or less. Standards for new buildings would be higher and much more detailed. With new school structures costing from twenty-five thousand to thirty thousand dollars per classroom,[34] both educators and parents should be willing to make some concessions to a building that stands debt free.

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[33] Ibid., pp. 126-127.

[34] Standards for Schoolhouse Construction, op. cit., p. 151.

1. Criteria on building location:

Criterion 1. The site should not be less than five acres in area. It must be arranged and developed for complete and safe utilization by the various age-grade groups.

Criterion 2. The school should be located near a community center within walking distance of the greatest possible number of pupils. Elementary students should not be required to walk more than three-quarters of a mile.

Criterion 3. Bus students should not be on the bus for longer than thirty minutes of one-way travel time.

Criterion 4. The location should protect pupils from traffic hazards, and from traffic and industrial noises and odors.

2. Criteria on structural safety:

Criterion 5. Buildings of more than one story should be fire-resistive throughout. It is especially important that corridors and stairways be impervious to fire.

Criterion 6. Outer and inner walls, roof, and ceilings must be firm and straight.

Criterion 7. It is necessary that floors be level, sound, and firm to the tread of large groups of pupils.

Criterion 8. In addition to being fire-resistive, stairways should be strong, wide enough for double traffic, and should not rise to a height of more than ten feet beyond a landing.

Criterion 9. Stairways and exits should be sufficient in number to offer convenient escape routes from any part of the building.

Criterion 10. Exit doors must open outward and be provided with anti-panic bars.

Criterion 11. The heating plant should be located in a unit separate from the building. A furnace room located in the basement of an old building must

be surrounded by strong fire walls and be equipped with an automatic-closing fire door.

Criterion 12. Corridors eight to ten feet in width are needed.

3. Criteria on classroom space provisions:

Criterion 13. A good elementary school program demands classroom space provisions of at least twenty-five square feet per pupil.

Criterion 14. If instructional activities such as music, art, crafts must take place in the classroom each child should be provided with approximately thirty square feet of space.

4. Criteria on service facilities:

Criterion 15. The heating plant should provide a steady temperature of approximately seventy degrees.

Criterion 16. The ventilating system should provide a constant supply of fresh pure air.

Criterion 17. Natural lighting should come from a total window area equal to at least one-fifth the floor area of each classroom. Window sills should be above the eye-level of seated pupils. Windows should extend to within six inches of the ceiling for maximum exploitation of natural light.

Criterion 18. Artificial lighting should furnish a quantity of non-glare light at desk level sufficient to replace losses in natural lighting resulting from darkened skies. At least four fixtures are needed per room, and the fixtures located on the side away from the windows should have controls separate from those for the other fixtures. Lighting in corridors and on stairways should be sufficient to meet all safety requirements.

Criterion 19. Though it is desirable to have toilet facilities for each sex on each floor except the basement, minimum requirements for smaller elementary schools can be met by providing one toilet for each sex if:

a. The rooms are well-lighted and provided with positive ventilation.

b. The girls' toilet provides a water closet for each 30 and one lavatory for each 60 girls in school.

c. The boys' toilet provides one water closet for each 60, one urinal for each 30, and one lavatory for each group of 60 boys enrolled.

d. The toilet facilities are graded in size and height to accommodate the different age groups in school.

Criterion 20. A plentiful supply of hot water should be provided for lavatories, showers, and lunch rooms.

Criterion 21. The water source must be capable of supplying a daily minimum of twenty-five gallons of pure water per pupil.

Criterion 22. Each floor should have one drinking fountain plus an additional fountain for each 75 pupils.

5. Criteria on auxiliary facilities:

Criterion 23. Every elementary school should have a conveniently located school library capable of seating a minimum of thirty pupils.

Criterion 24. A good lunch should be served pupils who remain at school during the noon hour. Adequate dining, kitchen, and storage space must be provided.

Criterion 25. Every school needs an auditorium capable of seating the whole student body. It should be adequate to meet the needs of the community for group gatherings of various types. If indoor play space is lacking, the auditorium should be capable of conversion to play space for primary pupils.

Criterion 26. A gymnasium with a playing floor approximately forty feet wide and seventy feet long is highly desirable. Shower, dressing room, and locker space should be provided.

Criterion 27. A health unit is needed. Rest room space is needed for at least two cots plus safe storage for first aid equipment. Toilet and lavatory facilities should be provided in connection with the unit. It is desirable to have an examining room for use by the school nurse, doctor, and dentist.

Criterion 28. Space equivalent in size to an ordinary classroom is a minimum requirement for properly housing the administrative office of the small elementary school.

Criterion 29. Storage space for instructional supplies, custodial supplies and equipment, and for fuel is needed.

II. THE EVALUATION

Clinton Township is the southermost township of Vermillion County in West-Central Indiana. The township is bordered on the west by Illinois, on the south by Vigo County, on the east by the Wabash River, and on the north by Helt Township.

There are four schools in the township, Crompton Hill, Fairview, Jacksonville, and Universal. They are elementary schools, and each enrolls pupils for grades one through eight. High School students are transported to the city school at Clinton where they are enrolled as transfer students.

The map in Figure 1 shows building locations, attendance districts, and the location of homes that contributed children to each of the schools in May, 1950. When this information was combined with data from Table I, page 26, it seemed evident that the buildings are located in community

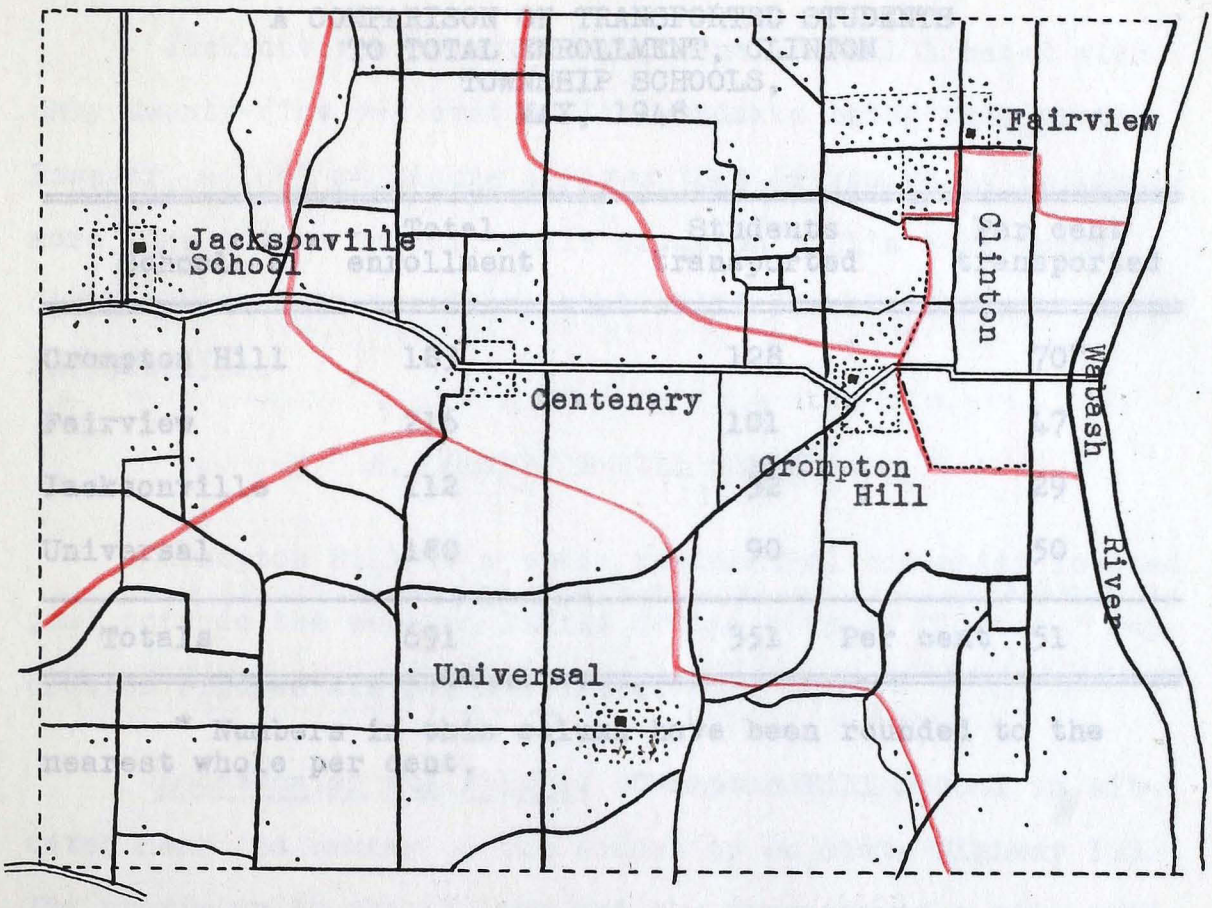

FIGURE I

PUPIL RESIDENCES, BUILDING LOCATIONS,
AND ATTENDANCE DISTRICTS,
CLINTON TOWNSHIP SCHOOLS
MAY, 1950

TABLE I

A COMPARISON OF TRANSPORTED STUDENTS TO TOTAL ENROLLMENT, CLINTON TOWNSHIP SCHOOLS, MAY, 1948

School	Total enrollment	Students transported	Per cent transported
Crompton Hill	183	128	70*
Fairview	216	101	47
Jacksonville	112	32	29
Universal	180	90	50
Totals	691	351 Per cent	51

* Numbers in this column have been rounded to the nearest whole per cent.

centers where a sizable number of students are within reasonable walking distance of the school.

Jacksonville appears exceptionally well located with only twenty-nine per cent of its students being transported. However, a look at Figure 1 shows that Jacksonville is little more than a town school, while Crompton Hill's attendance district takes in territory that could be better served by Jacksonville.

A. CROMPTON HILL SCHOOL

Crompton Hill is a small residential community located just outside the western limits of the city of Clinton. Population figures are not available.

Location of the school. Crompton Hill School is situated near the center of the community on State Highway 163. Its proximity to the highway and the presence of a side road cutting across in front of the building make traffic safety a major problem.

The site has an area of slightly less than one acre. So much of this area is taken by the building that less than one-half acre is available for playground use. Much of the play space is located at the rear of the building where a softball diamond for the older students occupies the whole area. Since the building is near the highway and residences,

it will be impossible to expand to the south or east. A deep hollow borders the site on the west and north.

The only good things that can be said for the location are that village pupils have only short distances to walk, and that bus students are not on the road for longer than thirty minutes.

Structural safety. Except for the walls the building is not otherwise fire-resistive. However, exits are plentiful and none of the children is in much danger from being trapped by fire.

Walls are straight and firm. Floors are generally solid and level, although classroom floors in the older portion of the building need sanding and minor repairs.

Figure 2, shows a floor plan of the building. The gymnasium and Classrooms D and E above it were added in 1939 and first used in 1940.

Stairways and exits are wide enough for double traffic. The stairs are not fire-resistive. Doors open outward at the exits and are provided with anti-panic bars.

The heating plant is located in the building directly under one of the classrooms. Since the heating plant has a low pressure bioler, there is probably no great danger of an explosion. The furnace room is provided with an automatic-closing fire door.

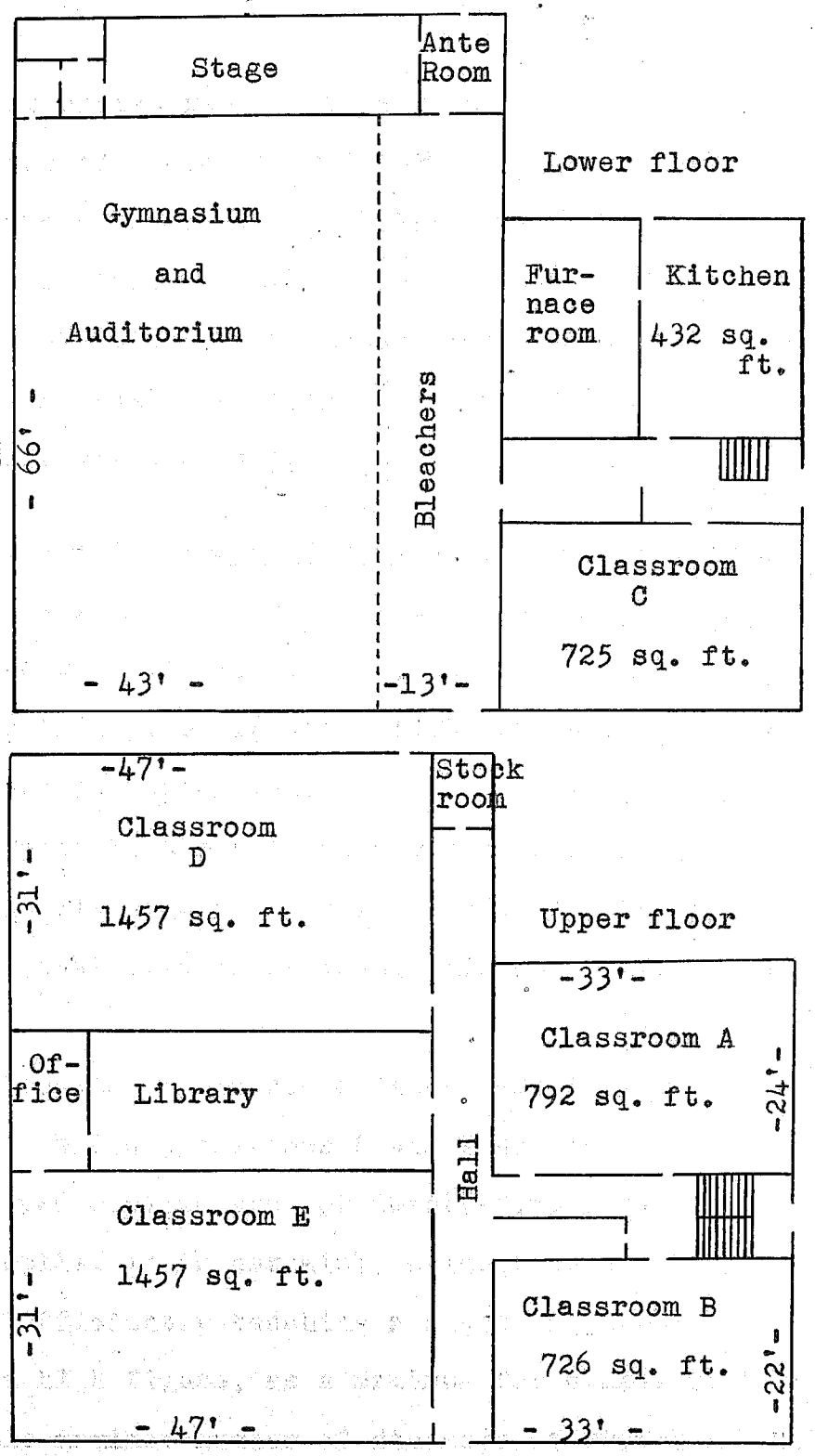

FIGURE 2

FLOOR PLAN OF CROMPTON HILL SCHOOL

Extensive repairs have recently been made on the roof and it should cause no trouble for several years.

The outside walls of the newer portion of the building are made of inferior brick that allowed water to seep through and ruin the plaster in Classroom E. An attempt has been made to seal the wall, but only time can tell whether or not the experiment was successful.

Classroom space provisions. The five classrooms used during the 1949-1950 school year, and their areas, are shown in Figure 2. Classrooms A, B, and C are in the older portion of the building, built about 1905, while Classrooms D and E are in the 1940 addition.

Table II shows the distribution of grades and pupils among the classrooms in April, 1950. The Table also compares usage at that time to desirable minimum pupil-space provisions.

Results of the comparisons made in Table II are misleading. While Classrooms D and E are capable of furnishing the desired minimum area of twenty-five square feet to each of 58 pupils, it is certainly evident that no teacher is capable of efficiently teaching a class of that size. If we set forty, a high figure, as a maximum for elementary classes the desirable maximum number of students at Crompton Hill would be reduced from 206 to 170.

TABLE II

PUPIL SPACE PROVISIONS IN CLASSROOMS OF CROMPTON HILL SCHOOL AS COMPARED TO ACCEPTABLE STANDARDS, APRIL, 1950

Class-room	Grades	Number of pupils	Area in sq.ft.	Sq.ft. per pupil	Desirable minimum sq.ft.per pupil	Desirable maximum number of pupils
A	1	25	792	32*	25	32*
B	2-3	35	726	21	25	29
C	3-4	39	726	19	25	29
D	5-6	42	1457	35	25	58
E	7-8	41	1467	36	25	58
Totals		182				206

* Figures in these columns are rounded to the nearest whole number.

Classroom C, the only basement room used for instruction, is not suited to that purpose. Steam pipes run through the room, and a metal supporting post is placed out in the room. It has only one door, which opens into a narrow hall adjacent to the furnace room. The danger has been minimized to an extent by providing a makeshift fire-escape through one of the windows. If this room were eliminated as a classroom the maximum number of pupils who should attend Crompton Hill would be reduced to approximately 140.

The two large classrooms would make excellent rooms for the primary grades.

Service facilities. Investigations revealed that the heating plant is reasonably satisfactory. It is capable of furnishing enough heat for the entire building, although the lack of automatic temperature controls results in rather wide temperature variations unless the janitor is constantly on the alert.

Ventilation is, in the main, by window adjustment. The older portion of the building does have a gravity system of ventilation, but it is not maintained and used to the extent possible.

The newer addition has no visible means of ventilation other than windows. Library and office spaces are placed between the two large rooms and must get their ventilation

from the windows of those rooms. Consequently, the library and office are often filled with stale air.

Minimum natural lighting requirements are met by only two of the classrooms, Rooms A and B. Classroom C has a total window area equalling less than ten per cent of the floor area. Rooms D and E have large window areas, but the rooms are so large that comparison revealed the window area only twelve per cent of the floor area.

Artificial lighting is very inadequate in the older section of the building. Two of the rooms have two globe-covered fixtures, while the basement classroom is lighted with three bare bulbs hanging at intervals down the center of the room.

The two largest Classrooms have good artificial lighting. Each has eight indirect type lighting fixtures spaced at proper intervals.

Crompton Hill School has no inside toilet facilities. Outside toilets for each sex are located on opposite sides of the play space about one hundred feet from the nearest building entrances.

Water for drinking and washing purposes must be carried into the building from a well near the front entrance. It should be relatively inexpensive to pipe water from the well into the building.

Auxiliary facilities. There are no provisions made at Crompton Hill School for serving lunches to the transported pupils.

The gymnasium provides the school with an excellant auditorium, and with plenty of indoor play space. The absence of proper toilet facilities, hot and cold running water, and shower and dressing room facilities limits the utilization of a room that any elementary school would be lucky to have.

The health unit consists of a small space taken from the upper hall. It has room for one cot and limited first aid equipment.

Office and library spaces are sufficient though lacking in ventilation and natural light.

Fuel storage space is satisfactory. Other storage needs are not so well met. However, a temporary structure on the school grounds does furnish storage for materials that do not need to be immediately available.

Summary. The school is rather well located for pupil convenience.

The site is almost totally inadequate, and there seems to be no possible way in which the play area can be increased.

The structure is in fair condition, and with proper maintenance practices could be usable for many more years.

Only four of the classrooms are suitable for instruc-

tional use.

The building should have inside toilets and an adequate water supply if it is to merit continued use.

While the gymnasium is adequate in space provisions for both auditorium and play use, its effectiveness is limited by the lack of water, toilet, and shower facilities.

One hundred eighty pupils are too many for this school. The enrollment should not exceed one hundred forty.

Suggestions for improvement. The possibility of transferring the seventh and eighth grade pupils to Clinton High School should be investigated. They would benefit from the wider curriculum offerings, and more playground space would be made available to the younger children. This move would also reduce the enrollment at Crompton Hill to a more satisfactory number.

The basement classroom and the so-called kitchen could be converted into satisfactory toilets.

An attempt to localize the attendance district should be made before new bus contracts are let in the summer of 1951. By limiting attendance to those pupils within a radius of approximately two miles of the school, the need for school lunches would not be so pressing.

B. FAIRVIEW SCHOOL

Location. Fairview School is located in the town of Fairview Park. The town adjoins Clinton on the north and north-west, and has a population of approximately nine hundred people.

The building is located on a two and one-half acre site. The area is just one-half the size this study recommends as a minimum for elementary schools. Fortunately, the building is placed on the site in such a manner that most of the remaining space can be used for playground activities. Just across the street, south of the building, is a large field belonging to the city of Clinton. In the past this field has been available for use by the older pupils.

The school site is in a pleasant residential neighborhood. The two streets which border the site on the west and south carry a moderate amount of traffic, but a vigilant safety patrol has thus far been sufficient to protect the pupils from traffic hazards.

Table I, page 26, shows that the school enrollment is divided almost equally between walking and transported students. Two busses serve the school, and none of the pupils is on the bus for over thirty minutes of one-way travel time.

Structural safety. The original structure at Fairview was build about 1905. In 1920 two classrooms were added, and

basement space was provided for indoor toilets. Figure 3 contains a floorplan of the two main floors. Classrooms C and H were added in 1920. Figure 4, page 39, shows the toilet rooms that were also added.

The outside walls are in surprisingly good condition. In fact, the whole structure seems sturdy and safe with only minor evidences of deterioration. New guttering should be installed on the older portion before serious damage occurs to the plaster on the inside walls. In a few places the outside walls should be painted.

Only the walls of the building are fire-resistive. All stairs are constructed of wood. Danger from fire is considerably minimized by the fact that children on the top floor have access to two wide stairways and a fire escape. Three wide exits are provided at ground level.

The stairs are sturdy. The main stairway from the upper floor to the west entrance is not broken by a landing and is dangerous. The stairs to the girls' toilet is also dangerous in that it is rather steep, has too long a run without a landing, and is too narrow.

The furnace room is located in the basement. It has an automatic-closing fire door. An explosion in the furnace room could block the single escape route from each of the toilet rooms.

Corridors are sufficiently wide, but are poorly light-

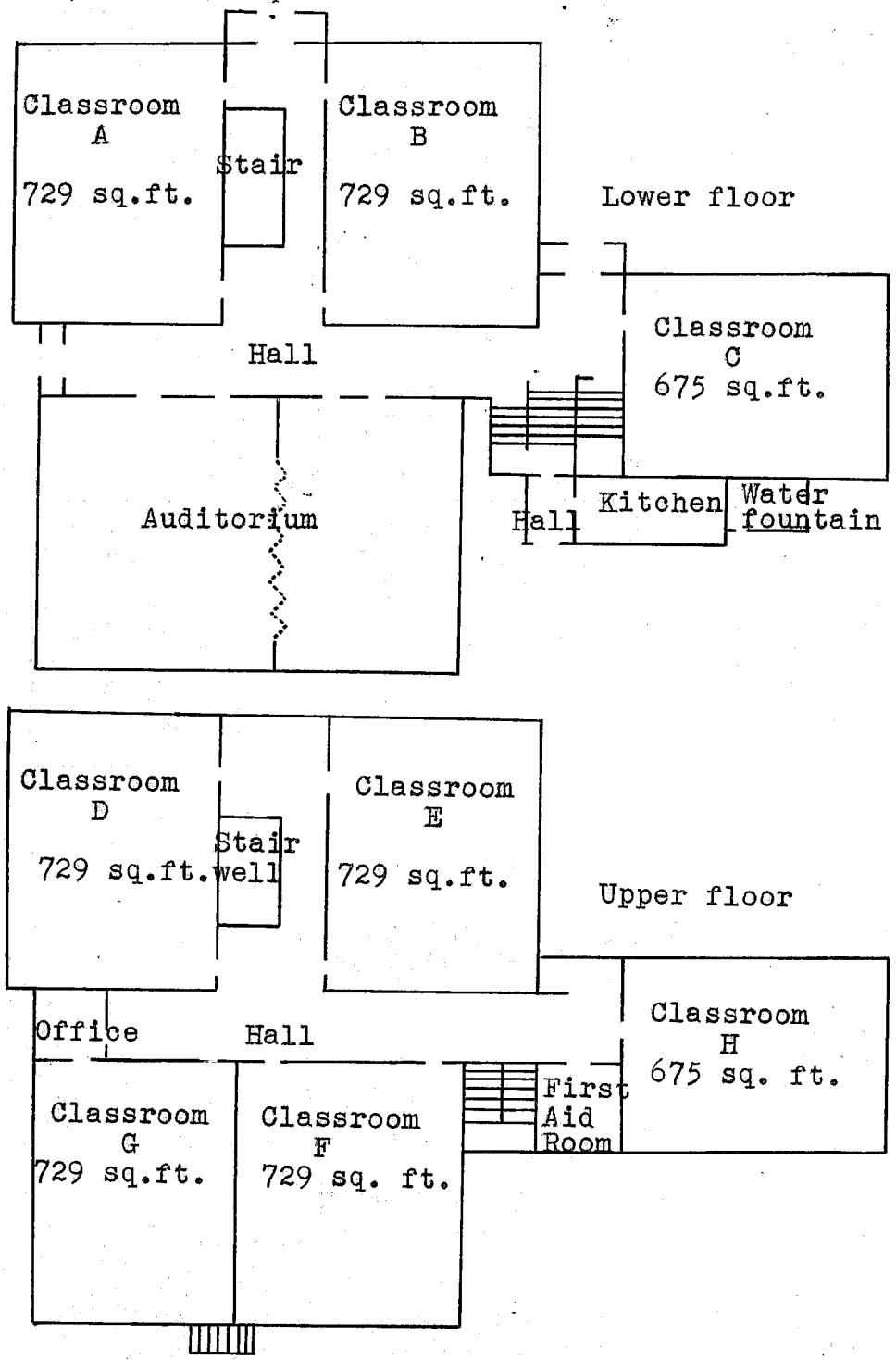

FIGURE 3

PLAN OF FIRST AND SECOND FLOORS
FAIRVIEW SCHOOL

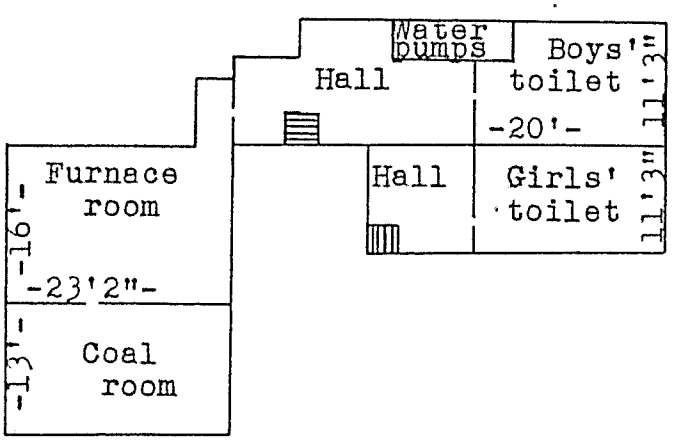

FIGURE 4

FLOOR PLAN OF BASEMENT
FAIRVIEW SCHOOL

ed, both naturally and artificially.

Classroom space provisions. At one time the school at Fairview had ten classrooms. However, two of the classrooms on the lower floor were made into a school auditorium several years ago. The wall between the two rooms was removed and folding doors installed.

Of the remaining eight classrooms only six were used for instructional purposes during the 1949-1950 school year. Locations of the various rooms are shown in Figure 3. Room sizes, and the number of pupils that each accommodated during the year 1949-1950 are shown in Table III.

Table III shows that the eight rooms can accommodate an enrollment of two hundred twenty-eight students and still provide 25 square feet per pupil. It also shows that approximately that number of students was housed in only six of the classrooms in April, 1950.

If at all possible, one of the classrooms should be converted to a library, or to a music, art, and craft room. Such a room is needed in the school to supplement classroom space for special pupil activities.

Classroom H is rather isolated from the other rooms and would make a good activity room. If this room is withdrawn from instructional use the building at Fairview should not have an enrollment of more than two hundred pupils.

TABLE III

PUPIL SPACE PROVISIONS IN CLASSROOMS
OF FAIRVIEW SCHOOL AS COMPARED
TO ACCEPTABLE STANDARDS
APRIL, 1950

Class-rooms	Grades	Number of pupils	Area in sq.ft.	Sq.ft. per pupil	Acceptable minimum sq.ft.per pupil	Acceptable maximum number of pupils
A	1	30	729	24	25	29
B	2	35	729	21	25	29
C	3-4	36	675	19	25	27
D	4-5	38	729	19	25	29
E	5-6	38	729	19	25	29
F	unused		729		25	29
G	7-8	39	729	18	25	29
H	unused		675		25	27
Totals		216				228

Note: All fractions have been rounded to the nearest whole number.

Service facilities. The heating plant at Fairview consists of two steam-type furnaces. The two furnaces can be operated in tandem or only one can be used to heat the whole building. Furnaces and boilers are in good condition and are capable of supplying enough heat for the coldest days. The structure does not heat evenly throughout because of the lack of building insulation, because of building arrangement, and because there is a certain amount of heat loss around the window frames of this old schoolhouse. Generally speaking, the heating plant and heating results at Fairview are satisfactory when teachers and janitor cooperate in the effort to make it so.

The building is provided with a gravity system of ventilation, but many of its units are inoperative. Since the flow of outside air is manually controlled at each radiator, the system is not at all practical when in good condition. Consequently, ventilation is poor. Windows are opened to provide fresh air, but costly heat losses and cold air currents result.

Instead of window area equalling one-fifth of the floor area in each classroom, a ratio of one to seven exists in the six classrooms in the older portion of the building. These rooms are provided with windows at side and back, making it difficult to eliminate both glare and shadow from pupils' desks.

The artificial lighting system does little to overcome

the inadequacies of the natural lighting system. Every classroom is provided with two light fixtures, each consisting of a single bulb covered with a frosted globe.

Fairview is the only school in the township with inside toilet facilities. The two toilet rooms are located in poorly lighted, poorly ventilated basement rooms. Otherwise, the toilets are fairly satisfactory. Water closet and urinal provisions are adequate. Each needs another lavatory, but this need is partially met by the location of a lavatory in the lower hall and another in the first aid room upstairs.

The school's water supply comes from the town water system and is sufficient for all present needs. Two water fountains are provided for each floor, one outside fountain is placed near the front of the building, and additional drinking fountains are available for pupils using the main part of the playground, which is located north and northeast of the schoolhouse.

There are no facilities for heating water. Labatories are provided with cold water only.

Auxiliary facilities. It has been the practice to use one of the unoccupied classrooms as a school library. The uncertainty of such an arrangement has kept the library from developing to a point where it is worthy of the name.

The school does not have a hot lunch program, but needs

one badly. Over one-half the pupils remain at school during the noon period. Many of them purchase a minced ham sandwich and a bottle of soda from the grocery store across the street. The room which has been designated as an auditorium would serve a much better purpose as a lunch room.

The auditorium is rarely used by the school. It will not seat the whole school satisfactorily. Its conversion to a lunch room would not deprive either the school or the community of a valuable meeting place.

Fairview does not have a gymnasium or other indoor play space.

The school's health unit consists of a small room, ten feet by nine feet. It is equipped with one cot, a first aid cabinet, and a lavatory. More space is needed and a water closet should be provided.

A partition across the south end of the upper hall provides an office space of eight feet by eight feet. Since the principal is also a full-time teacher, it would not be practical to take one of the classrooms for administrative space.

Storage space is lacking for extra maps, audio-visual aids, and other instructional aids and supplies that are not in constant use.

The coal room is adequate. Janitorial supplies and equipment are stored, more or less satisfactorily, in the base-

ment.

The kitchen shown in Figure 3 is a lean-to constructed of wood. It is too small for use in a school lunch program.

Summary and conclusions. Fairview School is well-located in relation to the community it serves.

The site is too small, providing only one-half the minimum space needed. Younger children are relegated to small spaces adjacent to the building by the space-consuming softball and football activities of the seventh and eighth grade students.

Though being far from fire-resistive, the structure is usable. For a building that has been standing nearly fifty years, it is in excellent condition.

The installation of a good artificial lighting system is an immediate need.

The ventilation system should be repaired and maintained at its highest level of efficiency. A special ventilating system should be installed for the two toilets.

One classroom should be converted to the status of general-purpose room. It should be fitted with black-out shades in order that the room can be used for visual aids. It can also serve as storage space for special instructional equipment and supplies by installing wall cabinets. Such a room

would have additional uses, as a music room, as a meeting place for school clubs, etc.

Each of the remaining classrooms should not house more than thirty pupils, and the total enrollment should not exceed two hundred pupils.

Fairview needs a hot lunch program. The auditorium is the logical place to house it. The north end of the double room could serve as the kitchen, while the south end would make an excellent dining room. Shelves could be built around the walls of the dining room, and it could also serve as the school library.

C. JACKSONVILLE SCHOOL

Location. Jacksonville School is situated in the small community center of Blanford. The village is located eight miles west of Clinton on State Highway 163.

The site has a total area of two acres. Outside toilets and the building break the area into units too small for softball and other related activities. It would be possible to develop the area for use by smaller pupils to a fairly satisfactory point.

Table I, page 26, shows that the school is very well located in relation to the community it serves. During the 1949-1950 school year, seventy-one per cent of the pupils walked to school.

In the matter of traffic safety, the location is very desirable. Streets along the site are virtually free of traffic.

Structural safety. The schoolhouse has masonry walls, but is not fire-resistive in any other way.

Considering its age (it was built in 1912) the building seems substantial. There is some evidence of settling apparent in the outer walls, but nothing serious.

The wooden stairs seem firm, but floors are generally bad throughout the building. In the auditorium, Figure 5, the floor is positively dangerous. Classroom A has a concrete floor, while other classrooms have buckled flooring that appears unsound in places.

Pupils on the lower floor have exits available at either end of the hall. Pupils on the upper floor have access to both the end exits, and to a wide exit on the south.

The heating plant is in the building, but is of the hot air type and is not likely to cause either an explosion or sudden all-consuming fire. It has the required fire door.

Classroom space provisions. Classrooms, with location and area, are shown in Figure 5. Table IV, page 49, indicates classroom use in the 1949-1950 school year, and compares the acceptable maximum enrollment to the enrollment that year.

The building has four classrooms, all of the same

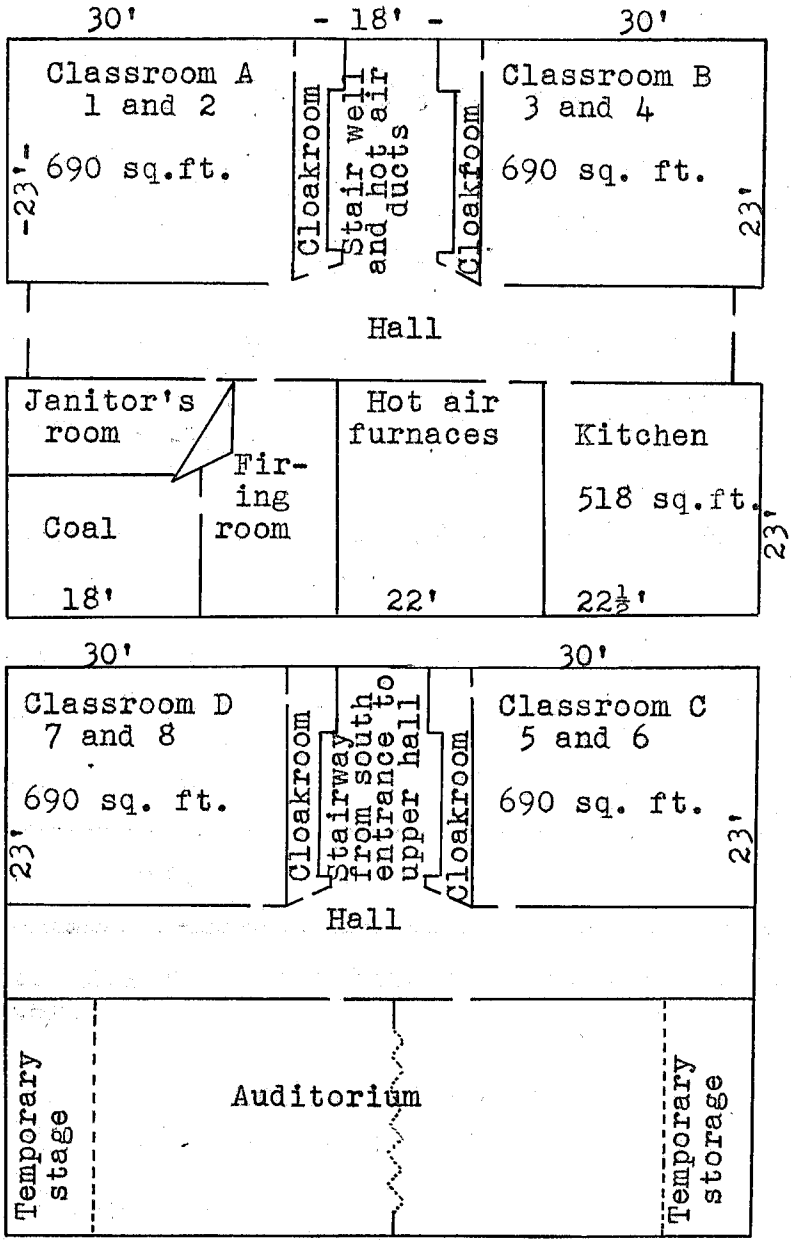

FIGURE 5

FLOOR PLAN OF JACKSONVILLE SCHOOL

TABLE IV

PUPIL SPACE PROVISIONS IN CLASSROOMS OF JACKSONVILLE SCHOOL AS COMPARED TO ACCEPTABLE STANDARDS APRIL, 1950

Class-rooms	Grades	Number of pupils	Area in sq.ft.	Sq.ft. per pupil	Acceptable minimum sq.ft.per pupil	Acceptable maximum number of pupils
A	1-2	28	690	25	25	28
B	3-4	34	690	20	25	28
C	5-6	22	690	31	25	28
D	7-8	26	690	27	25	28
Totals		110				112

Note: All fractions have been rounded to the nearest whole number.

dimensions, 23 by 30 feet. Allowing twenty-five square feet per pupil, each room can accommodate 28 pupils. Thus the school has classroom space for 112 children.

The instructional difficulties which arise from enrolling eight grades in a four room school are shown by Table IV. In 1949-1950, each teacher was forced to instruct two grade groups. Because of this already undesirable arrangement, one teacher instructed 34 pupils while another had only 22.

Service facilities. The old hot-air furnace does a reasonably good job of heating the building at Jacksonville. Heat is circulated by a fan, but the circulation does not provide proper ventilation. The schoolhouse is supplied with storm windows for winter weather, preventing the possibility of ventilation by window adjustment.

Natural lighting in the classrooms is inadequate. The ratio of window area to floor area is approximately one to seven in classrooms on the lower floor, while the two classrooms on the top floor also fall considerably short of the prescribed minimum ratio of one to five.

The artificial lighting system is even less adequate than the natural lighting. Classroom B has one good fluorescent light and 4 bare bulbs. Other rooms and the halls are lighted by bare bulbs.

Outside toilets are provided for the pupils. Both the toilets are at least two hundred feet from the nearest schoolhouse entrance.

The water system consists of a well, located about thirty feet from the west entrance. Each classroom is provided with a water bucket and each child supplies his own drinking cup.

Auxiliary facilities. Jacksonville does not have a school library, a school lunch program, a gymnasium, or an administrative unit. The auditorium, two former classrooms joined by removing the common wall, should not be used for any purpose, especially for group gatherings, until new flooring has been installed.

The kitchen is satisfactory for serving light refreshments for group meetings.

Conclusions and recommendations. The school at Jacksonville has two things in its favor; basic structural components are seemingly sturdy and safe, and the location is convenient to the homes of children in the immediate vicinity.

Against those two favorable elements can be martialed an imposing array of faults. The faults include bad flooring, outside toilets, poor lighting, a very unsatisfactory water supply, small playground area, insufficient classroom space to properly educate eight grade levels of pupils, and

inadequate service and auxiliary facilities.

It is extremely doubtful that an attempt to make this school into a satisfactory educational plant would be practical. The cost of rehabilitation could easily exceed the real value of the resulting improvements.

D. UNIVERSAL SCHOOL

Location. The town of Universal is located in the south-central section of Clinton Township. It has a population of nearly five hundred people. Fifty per cent of the pupils attending the school are provided by the town.

Universal School is situated near the center of town on a plot of one and eight-tenths acres. Its location is convenient to the rural homes in the attendance district.

The site is much too small. Older pupils have no place for the large-muscle activities they enjoy.

A great deal of traffic is carried on the road in front of the school, but a good school patrol is maintained for the safety of town pupils living south of the road.

Structural safety. Built in 1912, the schoolhouse at Universal is the best constructed of the four township schools. It should stand for many more years without necessity of major repairs to the basic structure.

Walls are fire-resistive, but all other building com-

ponents are constructed of wood. Stairways, except those to the basement, are firm and wide enough for double traffic. The basement stairs are narrow. Exits are provided at opposite ends of the main hall. Pupils on the upper floor have access to a fire escape., Makeshift fire escapes through windows are provided in the basement rooms.

Floors are generally sound and firm, although there are some instances of buckling. Minor repairs are needed on the floors.

The roof should not need major repairs for some time.

The heating plant is in the building. The plant is too small for the building, and heavy firing is necessary during cold weather. A larger furnace and boiler would lessen some of the danger of an exploding boiler. The required firedoor is provided for the furnace room.

Classroom space provisions. Classroom locations and areas are shown in Figure 6. Their uses during the 1949-1950 school year are outlined in Table V, page 55.

Originally, there were ten classrooms, two of them located in the basement. However, in recent years only five or six of the classrooms have been used for instructional purposes.

Classrooms G and F have been joined by removing the walls and cloak room between them. They can be isolated from

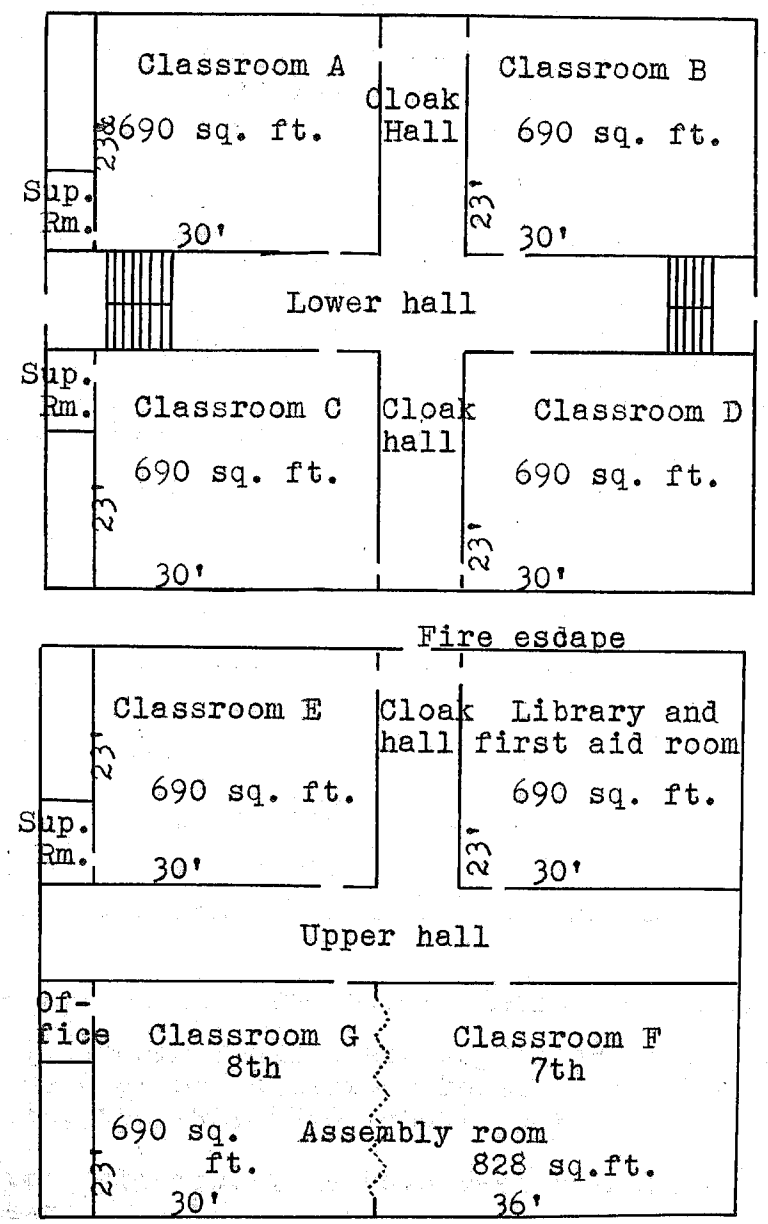

FIGURE 6

PLAN OF FIRST AND SECOND FLOORS
UNIVERSAL SCHOOL

TABLE V

PUPIL SPACE PROVISIONS IN CLASSROOMS
OF UNIVERSAL SCHOOL AS COMPARED
TO ACCEPTABLE STANDARDS
APRIL, 1950

Class-rooms	Grades	Number of pupils	Area in sq.ft.	Sq.ft. per pupil	Acceptable minimum sq.ft.per pupil	Acceptable maximum number of pupils
A	1	25	690	28	25	28
B	unused		690		25	28
C	2-3	37	690	19	25	28
D	3-4	42	690	16	25	28
E	5-6	43	690	16	25	28
F	7	32*	828	47*	25	33
G	8		690			28
Totals		179				201

* Classrooms F and G are separated by folding doors. They were used as one classroom housing the 7th and 8th grades during the 1949-1950 school year.

Note: All fractions have been rounded to the nearest whole number.

each other by closing the folding partition provided. Classroom G is large enough to provide twenty-five square feet of space to each of 33 pupils. Each of the remaining classrooms can supply the minimum per pupil space to only 28 pupils.

Classroom space is not being completely utilized as shown by Table V. During the 1949-1950 school year only six classrooms were used by 179 pupils. Five teachers were provided. By fully utilizing the space provisions of seven classrooms, the other being reserved for a general-purpose room, the school could serve an enrollment of 201 pupils.

Service facilities. Location of the heating plant is shown in Figure 7. The plant is too small and heavy firing is necessary in cold weather. Periodic replacement of the furnace grates has been necessary. Installation of a larger unit should result in better provisions for pupil safety and comfort, and in more economic operation.

Ventilation is poor and is obtained largely from window adjustment.

Window areas in all classrooms are not sufficient to provide needed natural lighting. The ratio of window area to floor area is one to six in each room.

Artificial lighting is also inadequate. Fixtures are provided down the center of the rooms, and bare bulbs predom-

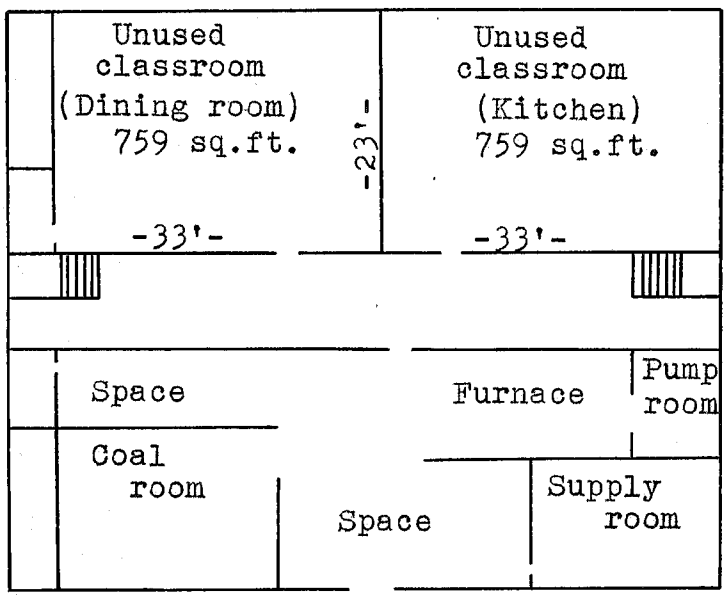

FIGURE 7

FLOOR PLAN OF BASEMENT
UNIVERSAL SCHOOL

inate.

Outside toilets are provided on the playground. Pupils must walk two hundred feet from the building to get to the toilets. Though basement toilets are not too desirable, they would certainly be a vast improvement over the present facilities. By moving the coal room to a location nearer the furnace, space could be provided for indoor toilets.

A water fountain and lavatory are provided for each of the two floors above the basement. An outside fountain is provided for the playground at a location near the south entrance.

One well furnishes water for the building. It is not unusual for the well to go dry. When this happens, water is brought from Clinton by truck. Water provisions are very unsatisfactory.

Auxiliary facilities. At present, one of the former classrooms on the upper floor is being used as a combination library and first aid room. Consequently, both library and health facilities are poor.

Classrooms G and F have served as a school auditorium. Since classes are taught in these rooms, auditorium use has been limited. The combined rooms are not desirable for community gatherings since Classroom F has fixed seats that are not suitable for adult use.

The school office is relegated to a space eight feet by five feet that was originally planned to be a supply room for Classroom G.

Universal school does not provide lunches for children remaining at school during the noon period. Such a program is badly needed. One-half of the students are transported. A floor plan of the basement is shown in Figure 7. The two unused classrooms indicated in the plan would provide space for a good lunch program. Many community and school groups could meet in the dining room.

Conclusions and recommendations. The structure itself can be safely used for several more years.

The playground area is less than half the minimum need. There seems to be little possibility of expanding the area.

The one classroom now being used for auxiliary space is not sufficient for library, health, and administrative needs.

An adequate school lunch program could be housed in the two basement rooms that have already been withdrawn from instructional use.

Inside toilets are badly needed. Space for toilets can be made by moving the coal storage room to available space nearer the furnace.

The water supply is inadequate. Tests should be made

to determine the feasability of obtaining an adequate water supply from additional driven or drilled wells.

Heating, ventilation, and artificial lighting systems need immediate improvement.

Through careful planning and wise spending, the building could be profitably rehabilitated.

III. SCHOOL POPULATION TRENDS IN CLINTON TOWNSHIP

In May, 1950, census was taken of pre-school and school age children in Clinton Township. The actual house-to-house count was made by the seventh and eighth grade students of the four schools. They were closely supervised by the principals. Complete cooperation was received from the trustee, bus drivers, and teachers.

Since the count of school age children was accurate, it was assumed that the number of pre-school children reported was also accurate.

Tables were made of known enrollments from 1940-1941 through 1949-1950. Figures were obtained from initial enrollment reports made in September of each year. From these tables it was possible to determine survival percentages for each entering group as it moved from the first grade through successive levels to the eighth grade. An average per cent of survival was then computed for each grade level. These figures were used with census results to compute estimated

enrollments for each school for the school years 1950-1951 through 1959-1960.

It is not intended that the estimated enrollments included in this chapter be used in any other way than as the best available indication of enrollment trends in Clinton Township. Actual figures are important only in that they indicate a trend.

When all possible data are available, predictions of future populations are subject to many possible errors. Predictions in this study were made without needed birth rate figures for the past several years. Since birth rate figures were not available, it was necessary to assume that all pre-school children counted will enter Clinton Township Schools without increase or decrease in number. Thus, mortality and possible shifts in population have been ignored.

Residence locations of children of pre-school age are shown in Figure 8. Comparison with the spot map contained in Figure 1, page 25, shows that the home locations are quite similar to those of school age children.

Enrollment trends in Crompton Hill School. Table VI, page 63, contains enrollment data for Crompton Hill for each September from 1944 through 1949. Since a school at Centenary was abandoned and its pupils sent to Crompton Hill in 1944, it was not practical to use enrollments for the years previous

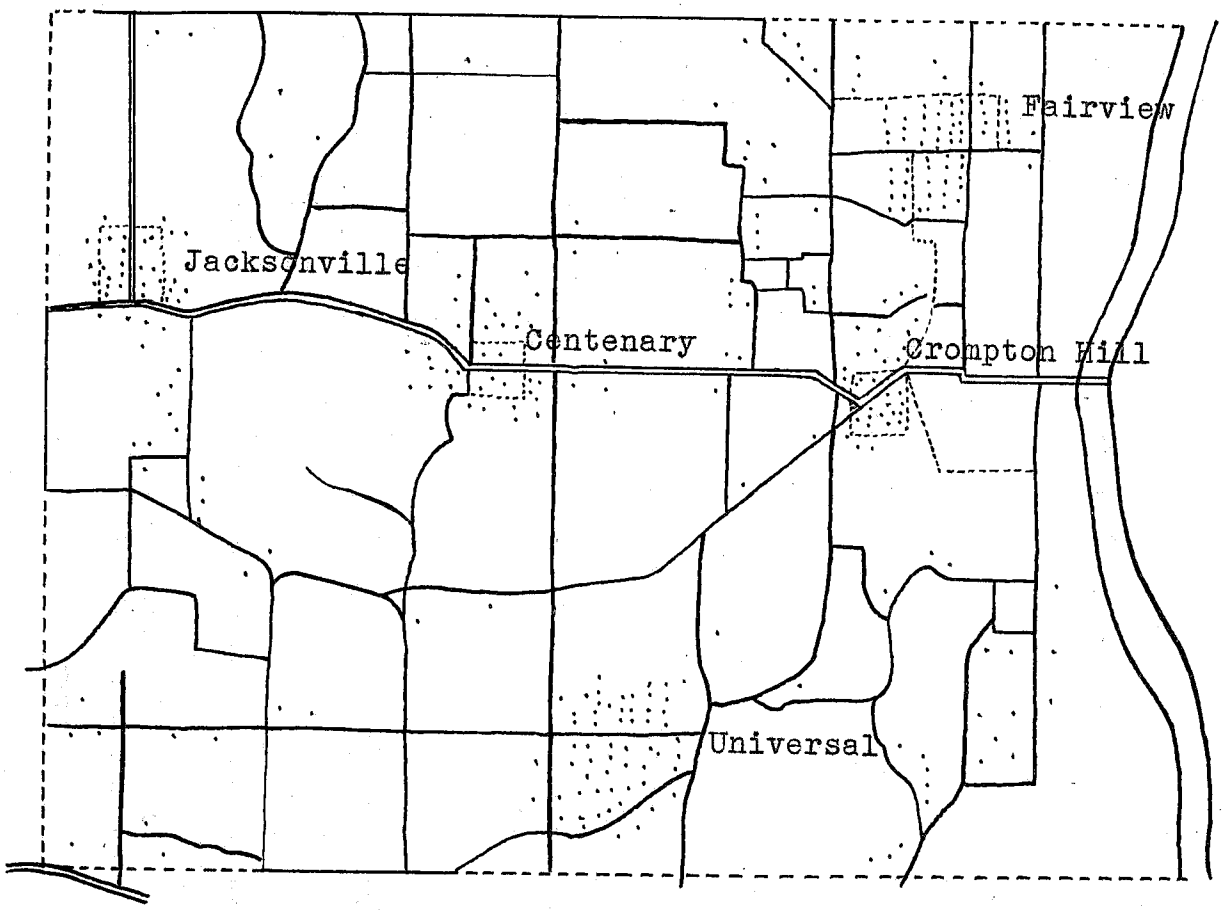

FIGURE 8

HOME LOCATIONS OF CLINTON TOWNSHIP
CHILDREN OF PRE-SCHOOL AGE
MAY, 1950

TABLE VI

ENROLLMENT SURVIVAL TRENDS BY GRADES FOR THE KNOWN YEARS 1940-1941 THROUGH 1949-1950 CROMPTON HILL SCHOOL

School year	Grade 1			Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Total 1-6	Total 7-8	Total 1-8
	Beginners	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.			
1940-41																				
1941-42																				
1942-43																				
1943-44		a																		
1944-45	22	24	109.1	22		23		16		13		15		24		15		113	39	152
1945-46	16	18	112.5	22	91.7	30	136.4	26	113.0	16	100.0	15	115.4	18	120.0	21	87.5	127	39	166
1946-47	21	24	114.3	16	88.9	20	90.9	22	73.3	25	96.2	17	106.3	12	80.0	17	94.4	124	29	153
1947-48	24	29	120.8	22	91.7	13	81.3	19	95.0	20	90.9	26	104.0	14	82.4	13	108.3	129	27	156
1948-49	21	24	114.3	30	103.4	21	95.5	15	115.4	22	115.8	25	125.0	18	69.2	15	107.1	137	33	170
1949-50	22	25	113.6	23	95.8	26	86.7	22	104.8	16	106.7	24	109.1	21	84.0	16	88.9	136	37	173
Average per cent of sur.			114.1		94.3		98.2		100.3		101.9		112.0		87.1		97.2			

[a] Figures in this column are made up of beginners plus returning failures of the previous year.

Note: Figures for years previous to 1944-1945 were not usable since Crompton Hill received a fifty per cent increase in enrollment that year as a result of another school's being abandoned.

to 1944.

In considering Table VI, and similar tables for each of the other schools, the two most important elements are the enrollment tendencies shown by the totals at the right, and the survival tendencies for each grade shown by the averages at the bottom of the table.

Survival tendencies are especially important since they are used in Table VII to project known figures into predictions for future enrollments.

The procedure for determining survival percentages may need explaining. Table VI indicates that there were 24 pupils in Grade 1 in September, 1944, and that 22 pupils enrolled in Grade 2 in September, 1945. By dividing the 22 by the 24 it was possible to compute the per cent of survival from Grade 1 to Grade 2 as being ninety-one and seven-tenths per cent. An average per cent of survival from Grade 1 to Grade 2 was then computed by averaging the survival percentages indicated for the various years. The average was then used in Table VII to project enrollments from Grade 1 of one year to Grade 2 of the next year.

The above procedure was used for all grades except the first. Since birth rates were not available, percentages for Grade 1 were found by comparing the number enrolled to the number of actual beginners. Therefore, the per cents do not indicate survival but simply indicate the effect of fail-

TABLE VII

ENROLLMENT ESTIMATES, 1950-1951 THROUGH 1959-1960,
BASED UPON KNOWN ENROLLMENT SURVIVAL TRENDS
CROMPTON HILL SCHOOL

School year	Be-gin-ners	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		To-tal 1-6	To-tal 7-8	To-tal 1-8
		No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.			
1950-51	26[a]	30	114.1	24	94.3	23	98.2	26	100.3	22	101.9	18	112.0	21	87.1	20	97.2	143	41	184
1951-52	28	32	114.1	28	94.3	24	98.2	23	100.3	26	101.9	25	112.0	16	87.1	20	97.2	158	36	194
1952-53	16	18	114.1	30	94.3	27	98.2	24	100.3	23	101.9	29	112.0	22	87.1	16	97.2	151	38	189
1953-54	25	29	114.1	17	94.3	29	98.2	27	100.3	24	101.9	26	112.0	25	87.1	21	97.2	152	46	198
1954-55	25	29	114.1	27	94.3	17	98.2	29	100.3	28	101.9	27	112.0	23	87.1	24	97.2	157	47	204
1955-56	16	18	114.1	27	94.3	27	98.2	17	100.3	30	101.9	31	112.0	24	87.1	22	97.2	150	46	196
1956-57		26[b]	114.1	17	94.3	27	98.2	27	100.3	17	101.9	34	112.0	27	87.1	23	97.2	148	50	198
1957-58		26	114.1	25	94.3	17	98.2	27	100.3	28	101.9	19	112.0	30	87.1	26	97.2	142	56	198
1958-59		26	114.1	25	94.3	25	98.2	17	100.3	28	101.9	31	112.0	17	87.1	29	97.2	152	46	198
1959-60		26	114.1	25	94.3	25	98.2	25	100.3	17	101.9	31	112.0	27	87.1	17	97.2	149	44	193

[a] Figures in this column were obtained by a census of pre-school children.

[b] Figures below this point are an average of first grade enrollments for the previous ten years.

ures of the previous year upon first grade enrollments.

Enrollment totals listed in Table VI show that there is a trend toward increased enrollments at Crompton Hill. This trend remains in evidence in Table VII. The estimated enrollments continue to increase, with one exception, each year up to and including school year 1954-1955, after which a tendency to level off is indicated.

In the evaluation of the building at Crompton Hill, it was recommended that the school should not have an enrollment of over one hundred forty pupils.[35] Estimates in Table VII reveal that the school may have to cope with approximately sixty more students than it has space to adequately house.

Enrollment trends in Fairview School. Enrollments at Fairview for the past ten years, shown in Table VIII, disclose no readily apparent trend to either increase or decrease. Though there was a noticeable drop from 1940-1941 to 1941-1942, subsequent enrollments have fluctuated about a common point slightly in excess of two hundred students.

Estimates found in Table IX, page 68, suggest that enrollments will decrease after the school year 1950-1951. The trend is strong enough to warrant the cautious statement that after 1952 the school population at Fairview will probably not

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[35] Cf. ante, p. 32.

TABLE VIII

ENROLLMENT SURVIVAL TRENDS BY GRADES FOR THE
KNOWN YEARS 1940-1941 THROUGH 1949-1950
FAIRVIEW SCHOOL

School year	Beginners	First No.	First % Sur.	Grade 2 No.	Grade 2 % Sur.	Grade 3 No.	Grade 3 % Sur.	Grade 4 No.	Grade 4 % Sur.	Grade 5 No.	Grade 5 % Sur.	Grade 6 No.	Grade 6 % Sur.	Grade 7 No.	Grade 7 % Sur.	Grade 8 No.	Grade 8 % Sur.	Total 1-6	Total 7-8	Total 1-8
1940-41		26[a]		27		39		31		38		28		36		29		189	65	254
1941-42		25		23	88.5	24	88.9	30	76.9	26	83.9	32	84.2	24	85.7	33	91.7	160	57	217
1942-43	20	23	115.0	23	92.0	23	100.0	27	112.5	24	80.0	27	103.8	39	121.9	26	108.3	147	65	212
1943-44	30	34	113.3	22	95.7	16	69.6	21	91.3	25	92.6	23	95.8	27	100.0	26	66.7	141	53	194
1944-45	26	27	103.8	29	85.3	23	104.5	15	93.8	23	109.5	21	84.0	30	130.4	24	88.9	138	54	192
1945-46	29	29	100.0	29	107.4	29	100.0	21	91.3	17	113.3	20	87.0	27	128.6	26	86.7	145	53	198
1946-47	32	36	112.5	32	110.3	30	103.4	29	100.0	21	100.0	15	88.2	22	110.0	28	103.7	163	50	213
1947-48	30	36	120.0	32	88.9	25	78.1	26	86.7	29	100.0	17	81.0	14	93.3	20	90.9	165	34	199
1948-49	36	44	122.2	23	63.9	33	103.1	27	108.0	25	96.2	31	106.9	15	88.2	16	114.3	183	31	214
1949-50	24	31	129.2	35	79.5	22	95.7	29	87.9	25	92.6	30	120.0	26	83.9	14	93.3	172	40	212
Average % of survival			114.5		90.2		93.7		94.3		96.5		94.5		104.7		93.8			

[a] Figures in this column are made up of beginners plus returning failures of the previous year.

TABLE IX

ENROLLMENT ESTIMATES, 1950-1951 THROUGH 1959-1960
BASED UPON KNOWN ENROLLMENT SURVIVAL TRENDS
FAIRVIEW SCHOOL

School year	Be-ginners	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		To-tal 1-6	To-tal 7-8	To-tal 1-8
		No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.			
1950-51	25	29	114.5	28	90.2	33	93.7	21	94.3	28	96.5	24	94.5	31	104.7	24	93.8	163	55	218
1951-52	19	22	114.5	26	90.2	26	93.7	31	94.3	20	96.5	26	94.5	25	104.7	29	93.8	151	54	205
1952-53	20	23	114.5	20	90.2	24	93.7	24	94.3	30	96.5	19	94.5	27	104.7	23	93.8	140	50	190
1953-54	22	25	114.5	21	90.2	19	93.7	23	94.3	23	96.5	28	94.5	20	104.7	25	93.8	139	45	184
1954-55	25	29	114.5	23	90.2	20	93.7	18	94.3	22	96.5	22	95.4	29	104.7	19	93. 8	134	48	183
1955-56	22	25	114.5	26	90.2	22	93.7	19	94.3	17	96.5	21	95.4	23	104.7	27	93.8	130	50	180
1956-57		30	114.5	23	90.2	24	93.7	21	94.3	18	96.5	16	95.5	22	104.7	22	93.8	132	44	176
1957-58		30	114.5	27	90.2	22	93.7	23	94.3	20	96.5	17	94.5	17	104.7	21	93.8	139	38	177
1958-59		30	114.5	27	90.2	25	93.5	21	94.3	22	96.5	19	94.5	18	104.7	16	93.8	144	34	178
1959-60		30	114.5	27	90.2	25	93.5	24	94.3	20	96.5	21	94.5	20	104.7	17	93.8	147	37	184

exceed the recommended maximum of two hundred students.[36]

Enrollment trends in Jacksonville School. Table X shows that Jacksonville School has had a rather constant school population since 1945. Totals in Table XI, page 71, reveal a slight decrease in estimated enrollments for the five years following 1950-1951. However, the number of students involved is so small that an error in census count or a slight population shift could easily change the picture. Available data do indicate, nevertheless, that there is a trend toward a decrease in enrollment at Jacksonville.

Enrollment trends in Universal School. Universal, like Fairview, had a considerable drop in enrollment after the schoolyyear 1940-1941 according to information contained in Table XII, page 72. After that year enrollments fluctuated considerably with periods of noticeable increases and decreases. Unfortunately, it was beyond the scope of this study to investigate economic and other factors that affect community populations, and no explanation can be given for the unusual changes in school population at Universal. If Table XII can be said to indicate a trend, then that trend was one of considerable decrease from 1940 through 1945, followed by a noticeable gain in 1946, after which there has

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[36] Cf. ante, p. 46.

TABLE X

ENROLLMENT SURVIVAL TRENDS BY GRADES FOR THE KNOWN YEARS 1940-1941 THROUGH 1949-1950 JACKSONVILLE SCHOOL

School year	Be-gin-ners	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		To-tal 1-6	To-tal 7-8	To-tal 1-8
		No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.			
1940-41		19[a]		11		15		15		22		17		14		10		99	24	123
1941-42		13		17	89.5	13	118.2	19	126.7	11	73.3	21	95.5	15	88.2	19	135.7	94	34	128
1942-43	15	16	106.7	13	100.0	15	88.2	14	107.7	21	110.5	13	118.2	26	123.8	15	100.0	92	41	133
1943-44	22	24	109.1	14	87.5	14	107.7	17	113.3	14	100.0	21	100.0	14	107.7	17	65.4	104	31	135
1944-45	15	16	106.7	17	70.8	15	107.1	12	85.7	11	64.7	11	7816	19	90.5	10	71.4	82	29	111
1945-46	13	13	100.0	15	93.8	18	105.9	14	93.3	10	83.3	12	109.1	13	118.2	12	63.2	82	25	107
1946-47	14	16	114.5	17	130.8	17	113.3	15	83.3	14	100.0	11	110.0	10	83.3	11	84.6	90	21	111
1947-48	19	21	110.5	14	87.5	13	76.5	15	88.2	19	126.7	10	71.4	10	90.9	10	100.0	92	20	112
1948-49	18	19	105.6	21	100.0	11	78.6	14	107.7	19	126.7	16	84.2	6	60.0	10	100.0	100	16	116
1949-50	14	15	107.1	16	84.2	22	104.8	10	90.9	12	85.7	11	57.9	18	112.5	8	133.3	86	26	112
Average per cent of survival			107.5		93.8		100.0		99.9		96.8		91.7		97.2		94.8			

[a] Figures in this column are made up of beginners and returning failures of the previous year.

TABLE XI

ENROLLMENT ESTIMATES, 1950-1951 THROUGH 1959-1960,
BASED UPON KNOWN ENROLLMENT SURVIVAL TRENDS
JACKSONVILLE SCHOOL

School year	Be-gin-ners	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		To-tal 1-6	To-tal 7-8	TO-tal 1-8
		No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.			
1950-51	16	17	107.5	14	93.8	16	100.	22	99.6	10	96.8	11	91.7	11	97.2	17	94.8	90	28	118
1951-52	10	11	107.5	16	93.8	14	100.	16	99.6	21	96.8	9	91.7	11	97.2	10	94.8	87	21	108
1952-53	11	12	107.5	10	93.8	16	100.	14	99.6	15	96.8	19	91.7	9	97.2	10	94.8	86	19	105
1953-54	14	15	107.5	11	93.8	10	100.	16	99.6	14	96.8	14	91.7	18	97.2	9	94.8	80	27	107
1954-55	11	12	107.5	14	93.8	11	100.	10	99.6	15	96.8	13	91.7	14	97.2	17	94.8	75	31	106
1955-56	13	14	107.5	11	93.8	14	100.	11	99.6	10	96.8	14	91.7	13	97.2	13	94.8	74	26	100
1956-57		15	107.5	13	93.8	11	100.	14	99.6	11	96.8	9	91.7	14	97.2	12	94.8	73	26	99
1957-58		15	107.5	14	93.8	13	100.	11	99.6	14	96.8	10	91.7	9	97.2	13	94.8	77	22	99
1958-59		15	107.5	14	93.8	14	100.	13	99.6	11	96.8	13	91.7	10	97.2	9	94.8	80	19	99
1959-60		15	107.5	14	93.8	14	100.	14	99.6	13	96.8	10	91.7	13	97.2	9	94.8	80	22	102

TABLE XII

ENROLLMENT SURVIVAL TRENDS BY GRADES FOR THE
KNOWN YEARS 1940-1941 THROUGH 1949-1950
UNIVERSAL SCHOOL

School year	Beginners	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Total 1-6	Total 7-8	Total 1-8
		No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	Nom.	% Sur.			
1940-41		26[a]		25		25		30		25		34		36		37		165	73	238
1941-42		23		23	88.5	24	96.	23	92.	26	86.7	29	116.0	24	70.6	28	77.8	148	52	200
1942-43	27	31	114.8	22	95.7	18	78.3	25	104.2	24	104.3	22	84.6	27	93.1	27	112.5	142	54	196
1943-44	18	22	122.2	24	77.4	17	77.3	19	105.6	23	92.0	20	83.3	23	104.5	20	74.1	125	43	168
1944-45	13	16	123.1	17	77.3	19	79.2	18	105.9	15	78.9	24	104.3	18	90.0	23	100.0	109	41	150
1945-46	20	23	115.0	21	131.3	18	105.9	19	100.0	19	105.6	14	93.3	22	91.7	16	88.9	114	38	152
1946-47	27	33	122.2	22	95.7	22	104.8	26	144.4	21	110.5	24	126.3	15	107.1	26	118.2	148	41	189
1947-48	24	29	120.8	29	87.9	17	77.3	26	118.2	25	96.2	18	85.7	20	83.3	17	113.3	144	37	181
1948-49	18	21	116.7	30	103.4	28	96.6	14	82.4	18	69.2	23	92.0	18	100.	17	85.0	134	35	169
1949-50	20	23	115.0	21	100.0	28	93.3	29	103.6	16	114.3	25	138.9	15	65.2	16	88.9	142	31	173
Average per cent of survival			118.7		95.2		89.9		106.3		95.3		102.7		89.5		95.4			

[a] Figures in this column are made up of beginners and returning failures of the previous year.

been a tendency toward stability in school population.

The tendency toward stability is carried over into the estimated enrollments found in Table XIII. If the predictions can be trusted, enrollments at Universal will remain virtually static for the next ten years. The school population will probably not exceed the recommended maximum enrollment of two hundred students.[37]

School enrollment trends for the whole township. Data from the predictive tables for each school have been collected in Table XV, page 75, to give a total picture of estimated school enrollments for all Clinton Township. Totals for the known year 1949-1950 are included for comparative purposes.

According to Table XV, school enrollments in Clinton Township Schools will reach a maximum this next school year, 1950-1951. At that time there will be approximately seven hundred students enrolled in the schools, an increase of less than four per cent over the school population of the previous year. After the school year 1950-1951, the trend is toward a decrease in enrollment to a point slightly below the figures for 1949-1950.

The absence of any marked increases or decreases in estimated enrollments shown in Table XV leads to the conclu-

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[37] Cf. ante, p. 56.

TABLE XIII

ENROLLMENT ESTIMATES, 1950-1951 THROUGH 1959-1960,
BASED UPON KNOWN ENROLLMENT SURVIVAL TRENDS
UNIVERSAL SCHOOL

School year	Be-ginners	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		To-tal 1-6	To-tal 7-8	To-tal 1-8
		No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.	No.	% Sur.			
1950-51	20	24	118.7	22	95.2	19	89.9	30	106.3	28	95.3	16	102.7	22	89.5	14	95.4	139	36	175
1951-52	16	19	118.7	23	95.2	20	89.9	20	106.3	29	95.3	29	102.7	14	89.5	21	95.4	140	35	175
1952-53	17	20	118.7	18	95.2	21	89.9	21	106.3	19	95.3	19	102.7	26	89.5	13	95.4	129	39	168
1953-54	24	28	118.7	19	95.2	16	89.9	22	106.3	20	95.3	20	102.7	27	89.5	25	95.4	125	52	177
1954-55	29	34	118.7	27	95.2	17	89.9	17	106.3	21	95.3	21	102.7	18	89.5	26	95.4	137	44	181
1955-56	17	20	118.7	32	95.2	24	89.9	18	106.3	16	95.3	22	102.7	19	89.5	17	94.4	132	36	168
1956-57		25	118.7	19	95.2	29	89.9	26	106.3	17	95.3	16	102.7	20	89.5	18	95.4	132	38	170
1957-58		25	118.7	24	95.2	17	89.9	31	106.3	25	95.3	17	102.7	14	89.5	19	95.4	139	33	172
1958-59		25	118.7	24	95.2	22	89.9	18	106.3	30	95.3	26	102.7	15	89.5	13	95.4	145	28	173
1959-60		25	118.7	24	95.2	22	89.9	23	106.3	17	95.3	31	102.7	23	89.5	14	95.4	142	37	179

TABLE XV

THE 1949-1950 ENROLLMENT IN CLINTON TOWNSHIP SCHOOLS COMPARED TO PREDICTED ENROLLMENTS FOR 1950-1951 THROUGH 1959-1960

School year	Grades 1-6	Grades 7-8	Grades 1-8	Increase or decrease over 1949-1950
1949-1950	536	134	670	
1950-1951	535	160	695	3.7%
1951-1952	536	146	682	1.8%
1952-1953	506	146	652	-2.7%
1953-1954	496	170	666	- .6%
1954-1955	503	170	673	.04%
1955-1956	486	158	644	-3.9%
1956-1957	485	158	643	-4.0%
1957-1958	497	149	646	-3.6%
1958-1959	521	127	648	-3.3%
1959-1960	518	140	658	-1.8%

sion that future housing problems in the schools of Clinton Township will not be materially different from present problems. Thus, school officials and parents of Clinton Township have a distinct advantage over school planners of many communities in the fact that by planning for adequate housing of children now in school, they can meet the housing needs of at least the next ten years.

In the section of this chapter devoted to evaluating the various buildings, it was recommended that the school at Jacksonville be abandoned, and that the other three schools have a total maximum enrollment of not more than five hundred forty students. Yet, Table XV shows that approximately six hundred seventy students will have to be housed each year. This problem can be solved, and some other problems with it, by transferring the seventh and eighth grade students to Clinton High School. Earl C. Boyd, Superintendent of Clinton City Schools, has assured the author that the high school has room for these students. Table XV shows that enrollments in Grades 1 to 6 do not exceed five hundred forty in the school years for which estimates have been made.

Alternative suggestions include consolidation city and township systems in the hope that the city will have available space for township elementary pupils. If there is available space, students from both Fairview and Crompton Hill could conveniently be absorbed into the city system, making room at

those schools for pupils from Jacksonville.

Another plan that has much to recommend it calls for the purchase of at least ten acres of ground near Centenary and the erection of a new elementary schoolhouse large enough to house pupils from Jacksonville School in addition to the overflow from Crompton Hill.

Chapter IV contains the recommendations that seemed reasonable and practical to the author of this study. They are only suggestions and should not be considered final or authoritative.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

I. CONCLUSIONS

On the basis of the principles advanced by authorities in the area of school surveys together with the findings in this survey the following conclusions are presented:

1. The schoolhouse, with its provisions for instructional space and for pupil health and safety, plays a tremendously significant role in the development of an adequate educational program. None of the four school buildings in Clinton Township meets minimum standards that must be met before a school plant can become a positive factor in the educational program.

2. The schools at Fairview and Universal are in good enough condition to warrant rehabilitation and continued use until better facilities can be provided.

3. Crompton Hill School has too small a site and too few classrooms to make its continued use desirable. However, toilets and a water system should be installed, and when better facilities are found for the pupils, the building can serve admirably as a community center.

4. It would not be economically practical to attempt to rehabilitate Jacksonville School.

5. There is a definite need for a new building to house students from Jacksonville and Crompton Hill Schools.

6. The township will not experience an appreciable increase in school enrollments for at least another ten years.

II. RECOMMENDATIONS

As a result of the school survey reported herein and the conclusions reached from the survey, the following recommendations seem warranted:

1. Seventh and eighth grade pupils should be transferred to Clinton High School. Such a move would eliminate some of the most space-consuming activities from the playground and result in more play space for the younger children. The move would also make room at Universal and Fairview for students from Jacksonville.

2. The school at Jacksonville should be abandoned as soon as possible.

3. People of both the city and township should seriously consider the possibility of consolidating the two school corporations.

4. The township should start immediately to lay careful plans for a building program that will eventually replace present school facilities. This study recommends purchase of at least a ten acre site near Centenary. A six room build-

ing should be erected as soon as money is available. As time and money permit the building can be enlarged until it houses all township students not already adequately housed.

5. Before the building plan is put into operation, rehabilitation of Universal School should be completed.

6. School lunch programs should be initiated at Universal and Fairview.

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